KEY LANDSCAPE REHABILITATION PROJECTS

This chapter provides more specific information about the most important landscape rehabilitation projects for the adaptive use program at Fort Hancock. The projects highlighted below will require dedicated funding from sources outside the park's annual budget. All of the projects, which include new and modified parking facilities, replacement of street trees, replacement of street lighting, and replacement of street signage, are instrumental in providing a safe and historically appropriate environment for the new users of Fort Hancock.

SITE PARKING

Providing adequate vehicular circulation and parking will be an essential component of the success of the adaptive use program. The EA calls for the number of parking spaces in the larger Sandy Hook landscape to remain fairly static but for the parking facilities at Fort Hancock to increase. This redistribution of parking means that several new parking lots will be required at Fort Hancock and that several existing lots will be reconfigured. Capacity will be increased from 708 spaces to 1378 spaces. See Figure 3.1 for locations of Fort Hancock parking lots.

The EA calls for the creation of 665 new spaces at Fort Hancock. This treatment plan proposes 757. However, after consultation with the park, four additional parking lots totaling eighty spaces, including the reconfigured Chapel lot and the three Mess Hall lots, are also proposed in this plan, though they were not discussed in the EA. Removing those eighty spaces from the tally, the number of spaces proposed in this plan is just twelve more than directed in the EA.

A) Reconfigure Existing Chapel/Ferry Dock area

The existing Chapel and Ferry Dock parking lot is an informal packed earth lot that has spaces for approximately sixty- eight cars. In the summer season, the lot is also used by a shuttle bus that picks up beachgoers from the Ferry Dock. Future plans for the currently unused Chapel call renting the renovated building for events such as weddings and lectures. It is intended that the building function in concert with activities occurring at the Theatre and Mule Barn and will consequently need a central out- door gathering space.

Though the EA calls for the removal of all of the parking spaces at the Chapel/Ferry Dock, it is recommended to reconfigure the lot so bus pick- up and drop- off can occur along with limited parking for ferry service and Chapel events. The proposed plan includes sixty- two parking spaces. Traffic will enter

the site at north side of the area, into the parking lot located north of the Chapel, and exit via a semi- circular drive in front of the Chapel. The curved driveway, that closely resembles the layout of the historic driveway, may also double as drop- off for Chapel events and the shuttle bus. A paved patio area will be located at the main door of the Chapel, aligned with views of the post flagstaff and Rodman gun, providing an excellent orientation location where visitors can take in the wider Fort Hancock district. See Figure 3.2 for the proposed plan and Figures 3.3, 3.4, and 3.5 for alternatives considered but rejected.

B) Reconfigure Mule Barn Intersection

Proposals for the reuse of the Mule Barn that stands at the intersection of South Bragg Drive and Kearney Road identify food service or hospitality uses. This will bring visitors and patrons to the area throughout the day, generating considerable foot traffic. Currently the intersection of South Bragg and Kearney Road is greater than 90 degrees and encourages high vehicular speeds in the area. This may create conflicts in the future when pedestrian traffic increases. Another issue between existing conditions and potential reuse of the area is that the sidewalk outside the south doors of the Mule Barn are very narrow, placing patrons almost on South Bragg Street after exiting the Mule Barn.

Several adaptations to the area are recommended to accommodate the adaptive use. To create a wider pedestrian area on the north side of the Mule Barn, South Bragg Road should be realigned. By removing the small raised island, removing the curved turning lane onto South Bragg Road, and moving the road several feet to the south, a simplified ninety- degree intersection and wider sidewalk could be created. This will slow vehicular speeds and create a safe buffer for pedestrians entering and exiting the Mule Barn. The short segment of Kearney Road that travels east of the Rodman gun and west of the Mule Barn could be blocked to vehicular traffic with removable bollards, directing all traffic to access Hartshorne Drive via South Bragg Road. The unused roadway could then be used by the restaurant for outdoor seating. For a plan of the proposed realignment, see Figure 3.2 of the Chapel lot.

C) Expand Athletic Field Lot

Twenty- five parking spaces are currently provided at the Post Headquarters/Athletic Field, standing at the southern extents of the Athletic field. Future plans for the Post Headquarters and Bachelor Officers Quarters buildings include hospitality and administration. To serve the future need, twenty- two additional parking spaces are required. The existing lot will be expanded by two bays to the north and increased slightly east and west to accommodate the parking in a fairly linear configuration an avoid encroaching

too much on the Athletic Field. A vehicular drop- off has been proposed at the west side of the Bachelor Officers Quarters, along Kearney Road, to serve the hospitality uses planned for the building. See Figure 3.6 for the proposed plan and Figure 3.7 for an alternative considered but rejected.

D) Construct Coal Pit Lot

The Coal Pit Lot is planned for the historic location of the post's coal storage area along Kearney Road. It is currently undeveloped with small to mid- sized natural vegetation growing abundantly. Several concrete pads left over from the former railroad remain in the space. It is intended that this lot service buildings 1- 21 of Officers Row.

The proposed lot contains sixty- nine spaces, thirty four more than directed in the EA. The lot is set back from Kearney Road to leave room for a concrete pad that runs parallel to the road and space for a vegetative buffer. As the land rises slightly toward the rear of the space, the lot is not deep to reduce the amount of earth moving required. See Figure 3.8 for proposed plan and Figures 3.9 and 3.10 for alternatives considered but rejected.

E) Construct Coal Yard Lot

The Coal Yard Lot is proposed northwest of the Sandy Hook Lighthouse, near the corners of Hudson and Knox Roads. This lot is likely to service overflow traffic generated from the Lighthouse, proposed NPS visitor center, and activities at the former YMCA. The area is currently unprogrammed and dominated by native shrubs and small trees. The proposed lot calls for seventy- nine parking spaces, three more than the seventy- six proposed in the EA, and space for four busses. Busses dropping students or tour groups at the NPS visitor center could drive the short distance and park in the Coal Yard Lot. The proposed lot has two access points, one on Hudson Road and the other exiting just north of the Lighthouse. Pedestrian and bicycle traffic can access the future Multi- Use Path extension east of the lot, though a specially designated path. See Figure 3.11 for proposed plan and Figures 3.12 and 3.13 for alternatives considered but rejected.

F) Reconfigure South Parade Lot

The South Parade lot will be a critical parking facility at Fort Hancock due to its central location. The lot is currently a rough graded lot formerly the site of a large hospital annex on the south side of the Parade Ground, just east of the site of the former hospital building. A small portion at the west side of the open space is paved and parking occurs informally on the unstriped lot. Cars park haphazardly near the intersection of Kessler Road, some on the pavement and some on the grass. School busses often use the space, including the unpaved

portion, for drop- off and parking. An NPS restroom was created from the former morgue building at the southwest extent of the existing parking lot, which is often utilized by school groups and bus tours.

It is intended to provide ninety- two parking spaces at the South Parade lot to serve tenants in Barracks Row and the southern buildings of Officers Row, as stated in the EA. An infrequently used road runs along the south side of the lot, servicing the day- care center and NPS restrooms. This road does not serve through traffic and could be used for parallel parking for several buses. See Figure 3.14 for the proposed plan and Figure 3.15 for an alternative considered but rejected.

G) Construct Tent City Lot

The Tent City lot is proposed for an area south of the MAST Campus that historically served as the site of temporary tent housing for troops. It is currently an infrequently mowed grassy area abutting a tract of naturally growing grass and shrubs that serves as wildlife habitat. Underground utilities for the MAST Campus are located in the northwest corner of the space, witnessed by several vent pipes protruding from the ground. It is likely that this lot will serve the buildings of Barracks Row, as well as weekend beach traffic.

The treatment plan calls for adding 172 parking spaces, the same number specified in the EA. Access to the Tent City lot is provided along Gunnison Road and purposefully not into the MAST Campus. The north side of the parking lot will be screened with vegetation to separate the space from the school zone. The proposed plan avoids the underground utilities and utilizes the remainder of the space without encroaching into natural area to the east. See Figure 3.16 for the proposed plan and Figure 3.17 for an alternative considered but rejected.

H) Reconfigure Fort Hancock lot

The Fort Hancock Lot is centrally located to serve the future NPS visitor center, current administration building, and other tenants of Barracks Row. By reconfiguring the ninety spaces that exist today, an additional fourteen spaces can be added to maximize the area. A sidewalk and curb should be added along the edge of the parking lot along MAST Way to provide safe access for students entering and exiting the MAST campus. Additionally, the construction of a raised crosswalk at the junction of MAST Way and Magruder Road will slow vehicular speeds into the MAST campus and provide a safe crossing for students. See Figure 3.18 for the proposed plan.

F) Construct Paddock Lot

The Paddock area is a mowed grass field encircled by a post and rail fence located northeast of the Mule Barn. This site has been proposed as the location of a parking lot to service activities centered at the Chapel, Mule Barn, and Theater. Because of its size, the lot could also be used for special event overflow parking. The treatment plan has proposed a parking lot with two egress points on South Bragg Road, a sidewalk to the Mule Barn/Chapel/Theatre area and room for 156 cars. Some of this parking lot may be left as reinforced turf to make a smaller paved area and to allow more surface drainage. See Figure 3.19 for the proposed plan.

I) Construct Warehouse Lot

It is proposed to lease space in the complex currently used by the NPS for maintenance activities. The NPS would retain access and sole control over the east portion of the maintenance yard with two buildings in the west part of the complex being rented. Subsequently, parking must be provided at these structures. The EA calls for sixty- five spaces at the western extents of the maintenance yard, which is supported by the proposal of this treatment plan. The lot would be located south of the NPS gas pumps and screened on that side and to the east to separate tenant activities from the NPS storage yard. NPS maintenance vehicles would be rerouted to access the site solely from the east. See Figure 3.20 for the proposed plan.

J) Construct Tennis Lot

A parking lot is proposed to serve the Officers Club and beach parking near the intersection of Kilpatrick and Atlantic Drives. The area is currently an infrequently mowed area and a NPS restroom facility is located across Atlantic Drive. Fifty- five spaces are proposed, two less that the EA directive, with two egress points, one on Kilpatrick Drive and the other on Atlantic Drive. See Figure 3.21 for the proposed plan and Figure 3.22 for an alternative considered but rejected.

K) Construct Mess Hall Lots

Small capacity parking lots will be added at the mess halls lining Magruder Road, Buildings 55, 56, and 57. One six- car lot currently exists on the south side of Building 58, the NPS Headquarters, and will serve as a model for the others. The lots will be used primarily for handicapped parking and deliveries for the buildings of Barracks Row. A lot will be located on the north side of Building 57, the south side of Building 56, and the north side of Building 57. This configuration will leave an uninterrupted corridor between Buildings 57 and 56,

the main viewshed connecting the east and west sides of the Parade Ground. See Figure 3.23 for the proposed plan.

L) Reconfigure Gas Station Intersection

Currently the area surrounding the gas station is a busy vehicular and pedestrian area due to the presence of the NPS headquarters building, Brookdale College, and the Keepers Quarters Museum. This use will increase markedly in the future when the NPS visitor center moves to the area and other buildings are leased. Little directional signage is provided for motorists and even less for pedestrians.

It is recommended to provide more structure to the area to reduce the potential for conflict between motorists and pedestrians. A defined three- way stop should be created at the intersection of Magruder and Hudson Roads. One way roads should be established around the Gas Station to direct the flow of traffic past Brookdale College and the Keepers Quarters Museum. Also, the intersection at the corner of the Gas Station and Mercer Road should be defined with bollards. It is currently an expanse asphalt that leads to vehicular confusion. See Figure 3.24 for the proposed plan and Figures 3.25, 3.26, and 3.27 for alternatives suggested but rejected.

STREET TREE REPLACEMENT

The street tree planting plan generated for Fort Hancock includes 176 trees, in a mixture of London planetrees, hackberries, sycamore maples, and red oaks. See Figure 3.28 for the proposed street tree planting plan. See the street tree section of the previous chapter for specific actions relating to planting methods and tree selection.

It is recommended to plant one and one half inch caliper trees that are commercially available for approximately three hundred and fifty dollars. Installation and a one- year maintenance contract that includes watering will likely cost six hundred and fifty dollars. Therefore, each tree at Fort Hancock will cost approximately one thousand dollars. One hundred and seventy- six new street trees are proposed for Fort Hancock.

STREET LIGHTING REPLACEMENT

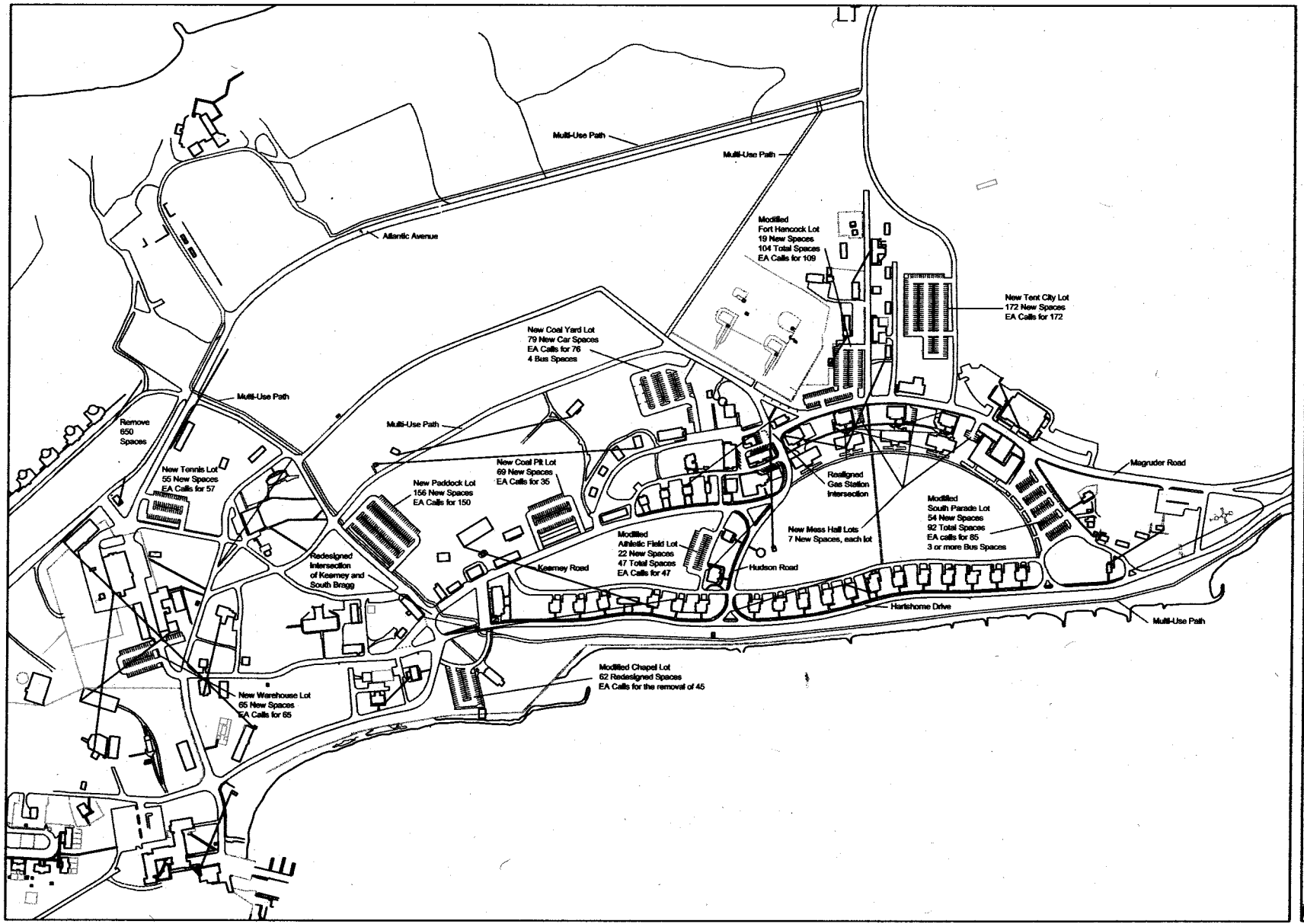
Replacement of the Fort Hancock streetlights should be implemented only after the completion of a comprehensive utility study and a lighting plan by a lighting engineer. The lighting guidelines in this report can be incorporated into a professional lighting plan, notably the recommendations about adequate light

levels, and design, height, and placement of the new and replacement light fixtures.

Currently, seventy- four streetlights, both functioning and non- functioning, exist on site. Of those, twenty- seven should remain, including the "shoe- box" lights at the MAST and NOAA facilities, and the historic concrete lights in Sergeants Row. To adequately light the district, 200 new and replacement fixtures are recommended, creating an approximate streetlight total of 227 fixtures.

See Figures 3.28- 3.31 for the proposed street light replacement plan. This schematic plan was generated to arrive at a rough fixture count to generate replacement costs from. Cost information TBA.

When nearing the implementation phase of the streetlight project, consider purchasing the light fixtures directly from the manufacturer. By contracting only the installation component of the project, the park may reap substantial savings. If the entire project is contracted to a lighting or general contractor, that company will purchase the fixtures from a lighting wholesaler, passing on the cost of the middle- man. However, the park may opt to pay more to have the contractor take responsibility for the purchase, delivery, and installation. Another benefit of contracting the entire project would be avoiding a contracting exercise and eliminating the responsibility for maintaining the quality and condition of the fixtures before they are installed.



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

Proposed Parking Plan

Figure 3.1

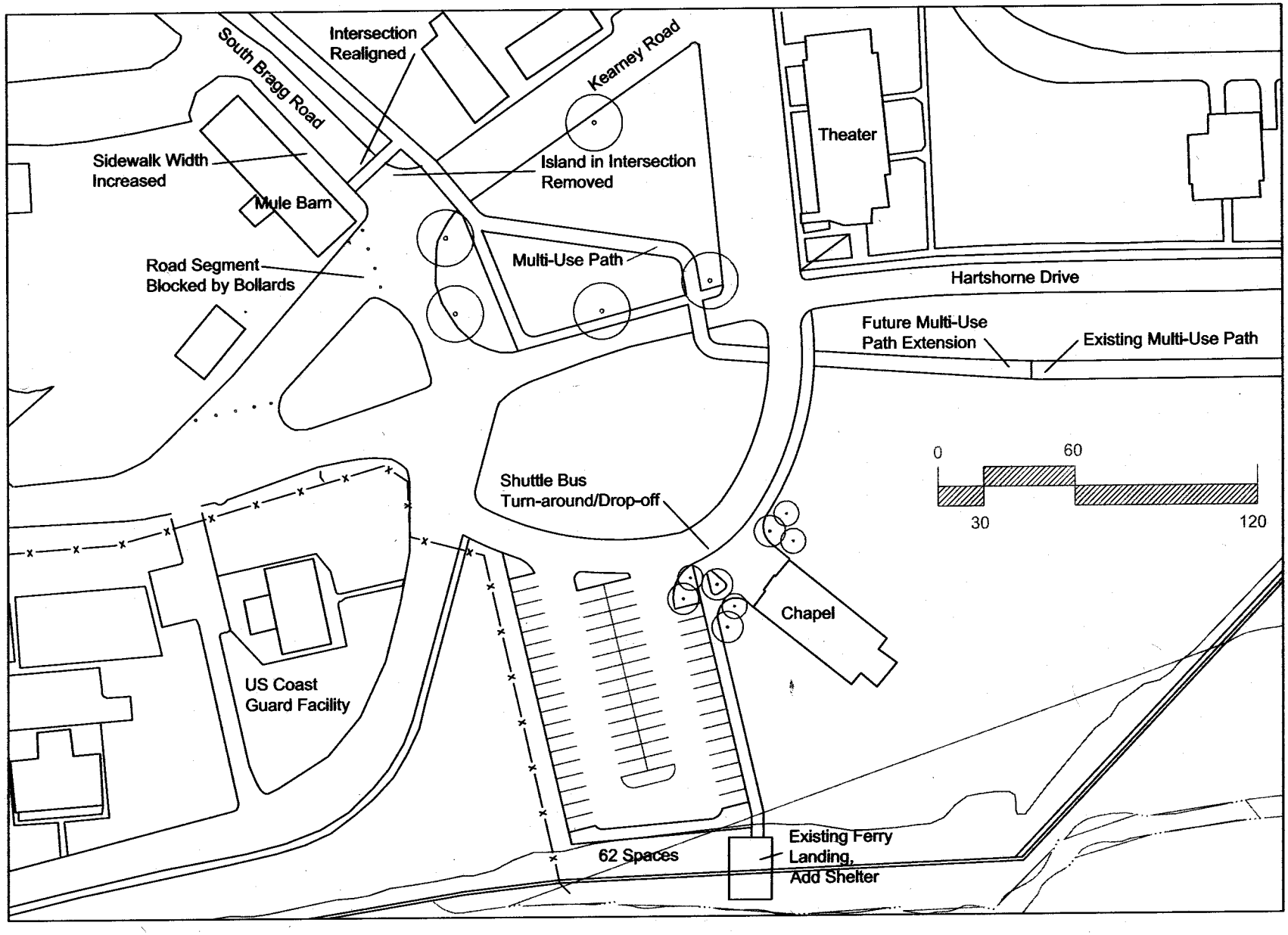
Note: Parking numbers reflect preferred alternatives

National Park Service
Olmsted Center for
Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=400'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

Modified Chapel Alternative A Preferred Alternative

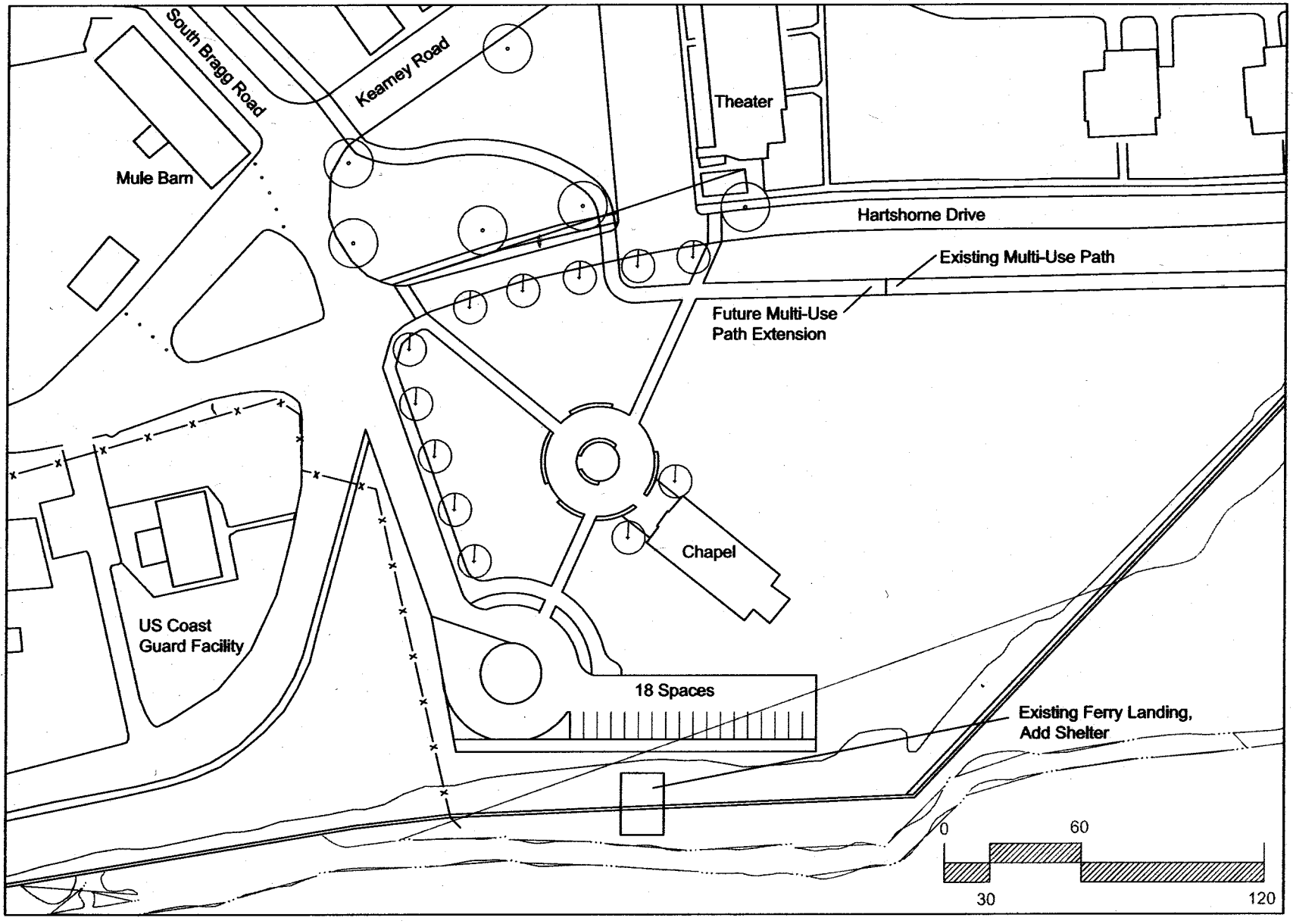
Figure 3.2

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=60'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

Modified Chapel Alternative B

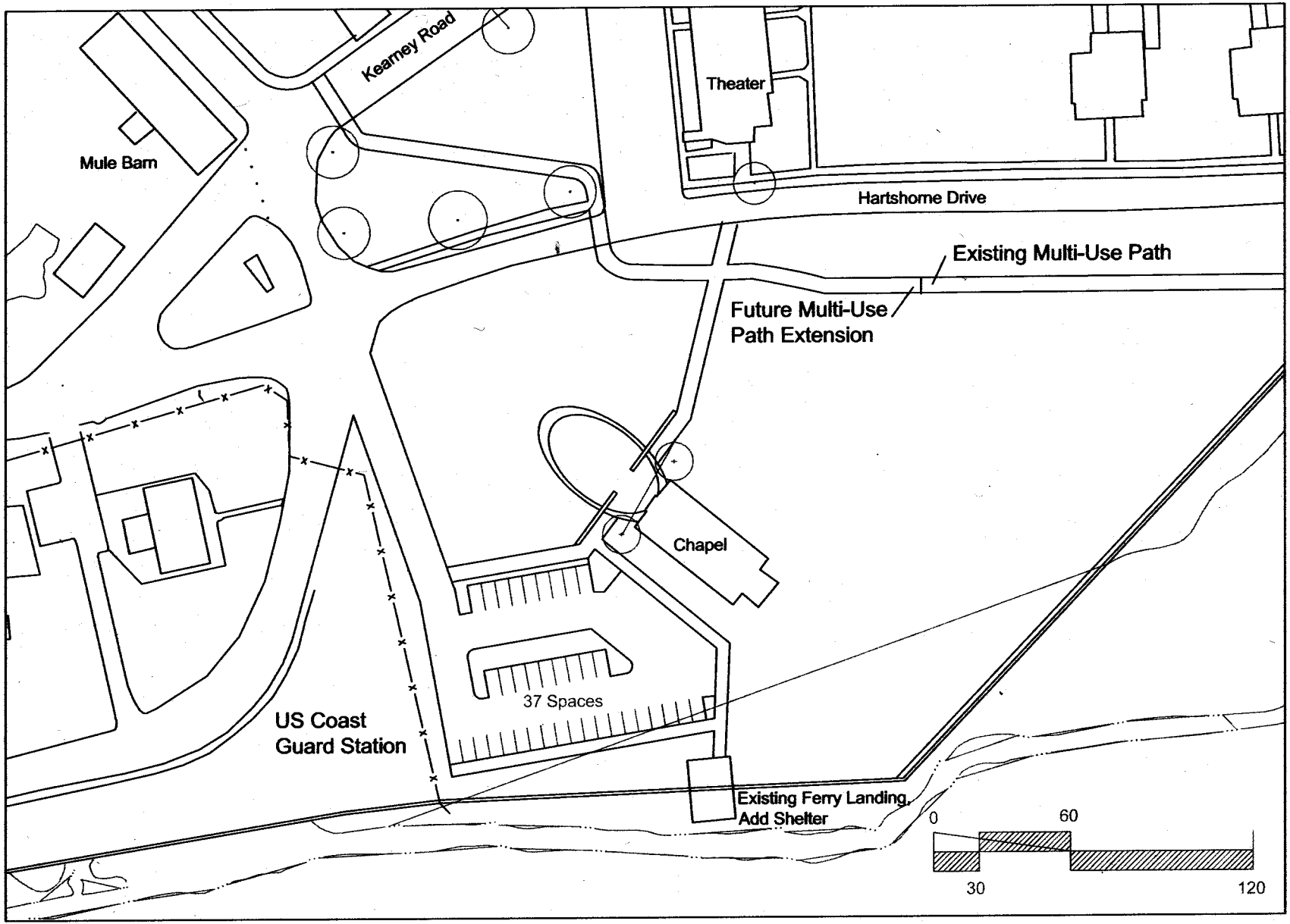
Figure 3.3

National Park Service
Olmsted Center for
Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=60'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

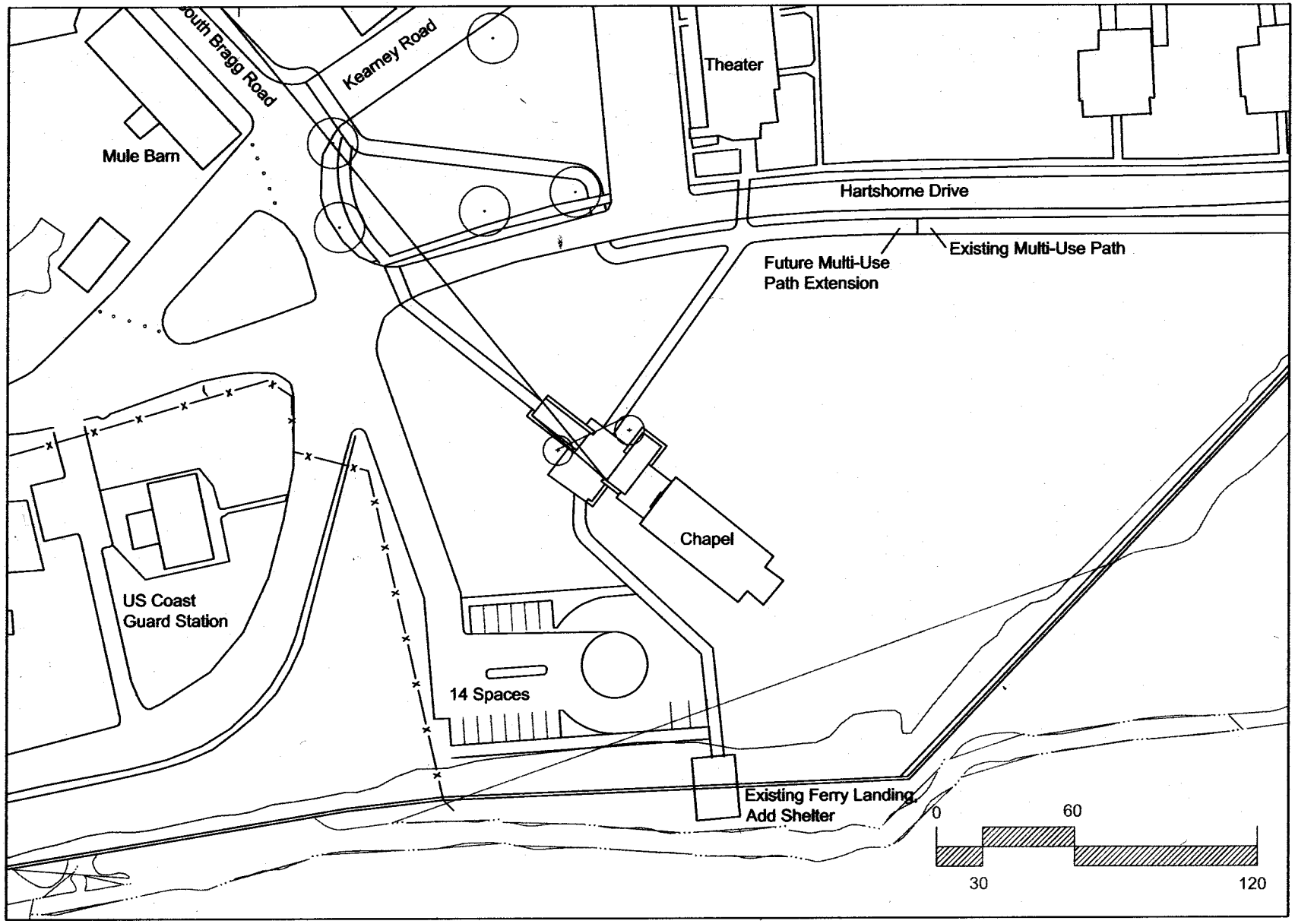
Modified Chapel Alternative C

Figure 3.4

National Park Service
Olmsted Center for
Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=60'



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

Chapel Alternative D

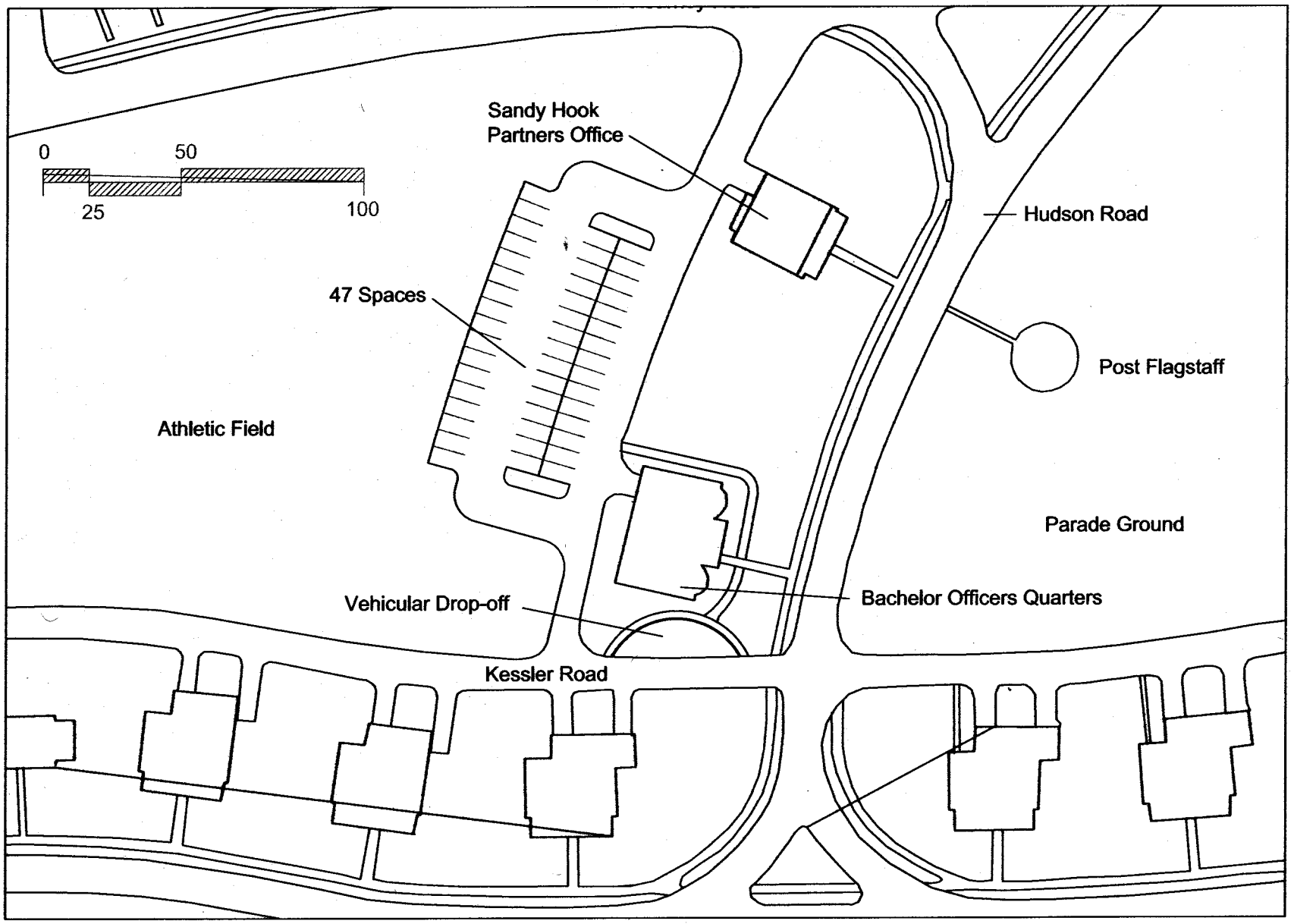
Figure 3.5

National Park Service
Olmsted Center for
Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=60'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

Modified Athletic Field Lot

Alternative A Preferred Alternative

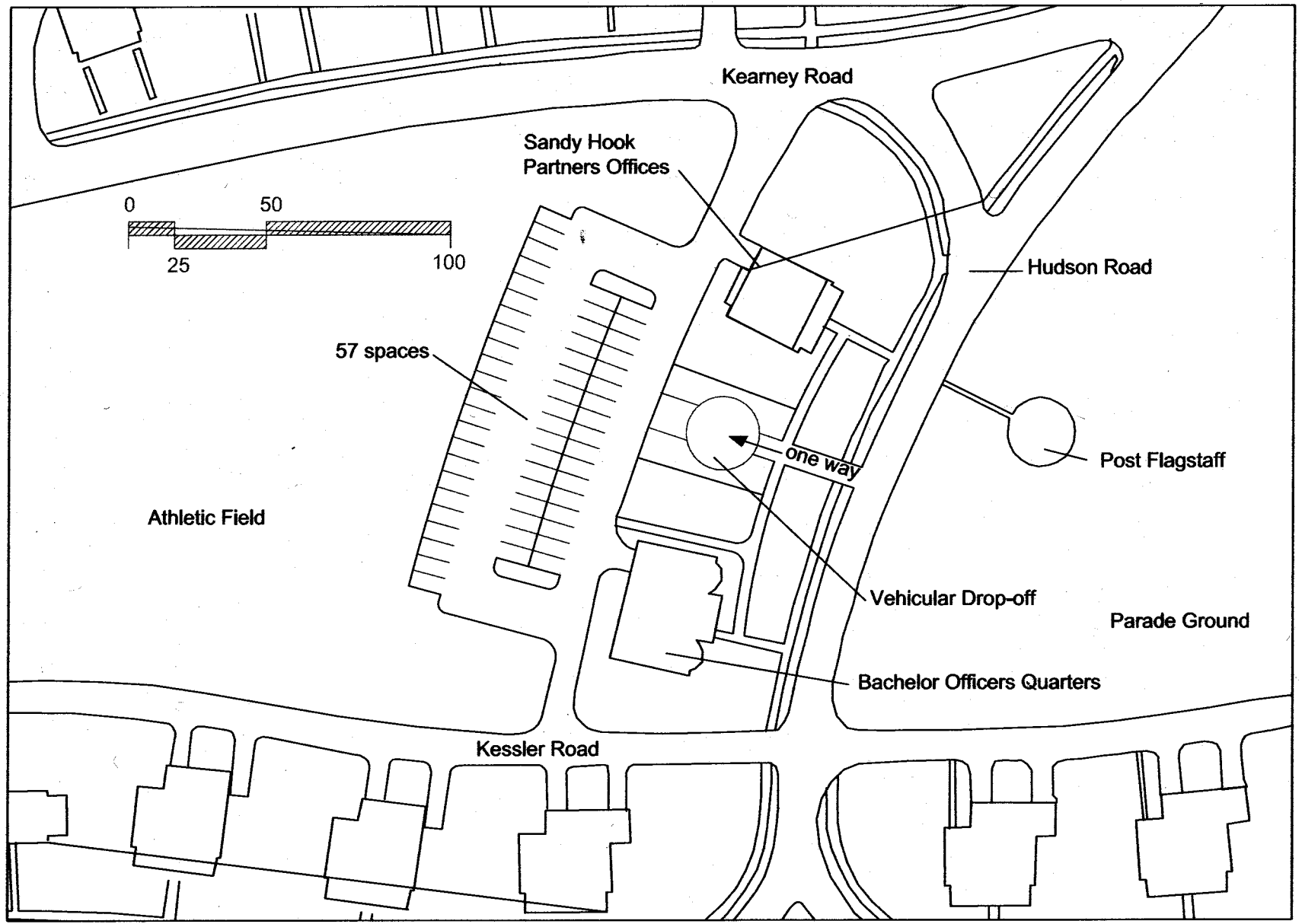
Figure 3.6

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=50'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

Modified Athletic Field Lot

Alternative B

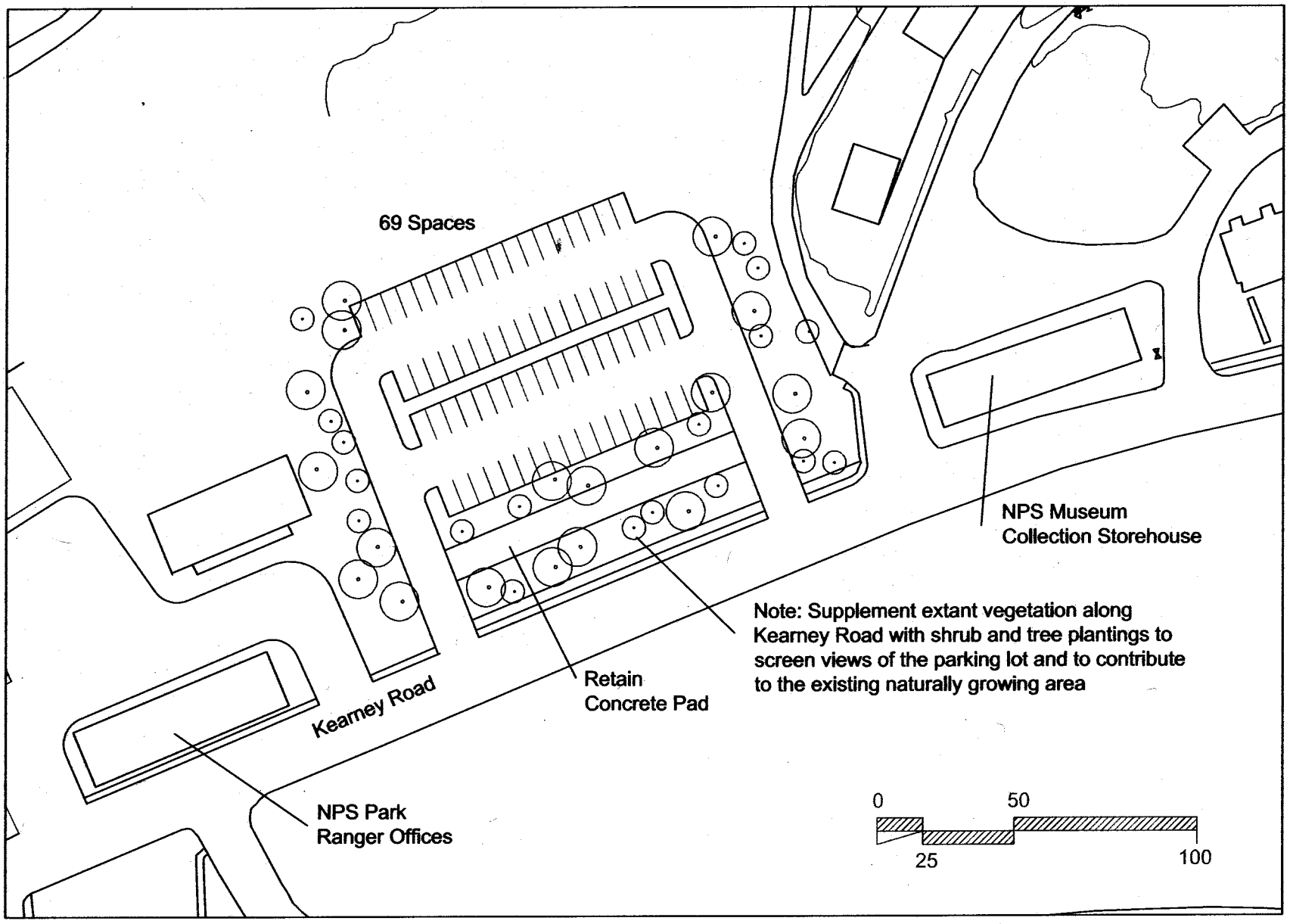
Figure 3.7

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=50'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

New Coal Pit Lot Alternative A Preferred Alternative

Figure 3.8

National Park Service
Olmsted Center for
Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

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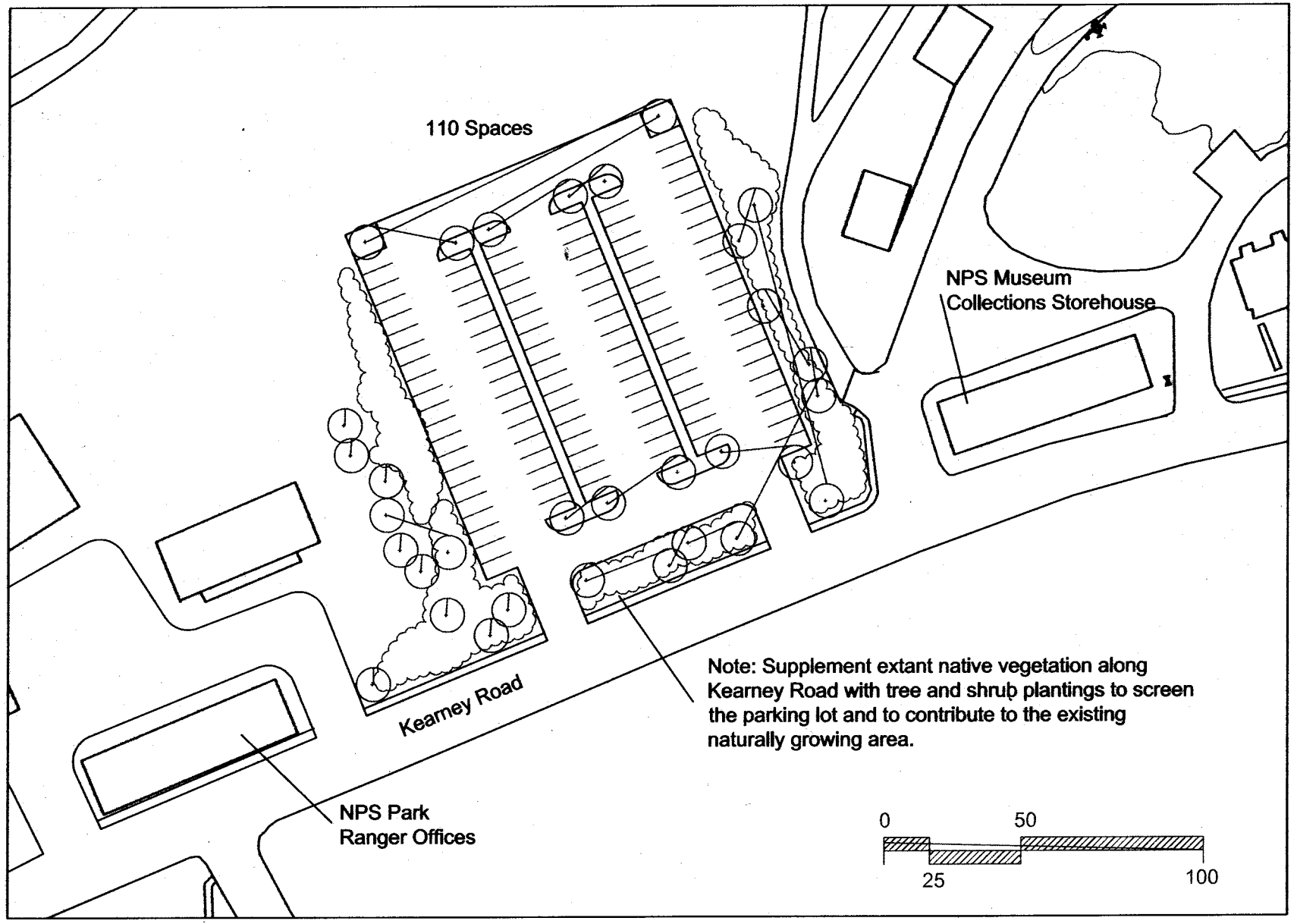


Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

New Coal Pit Lot Alternative B

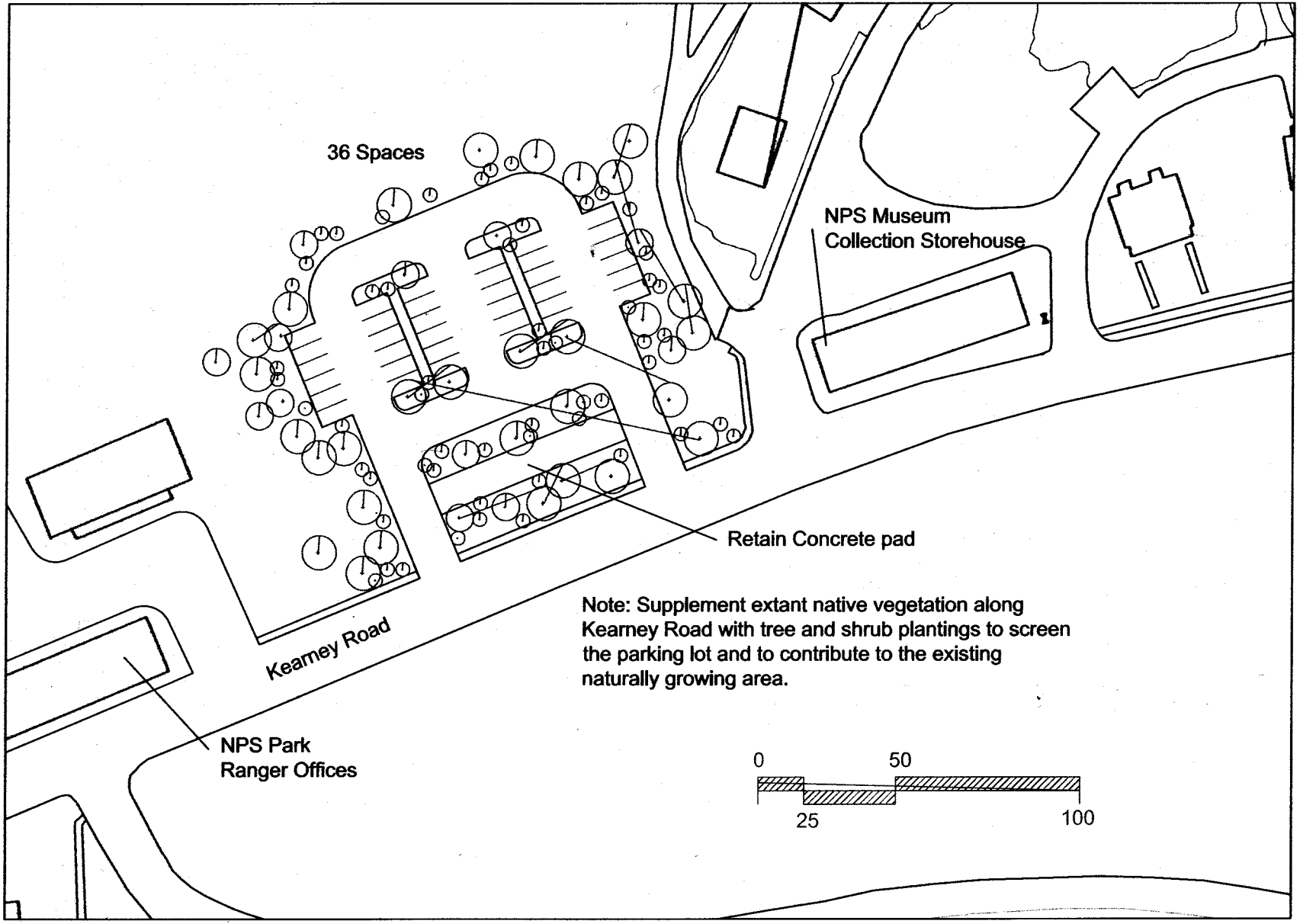
Figure 3.9

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=50'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

New Coal Pit Lot Alternative C

Figure 3.10

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

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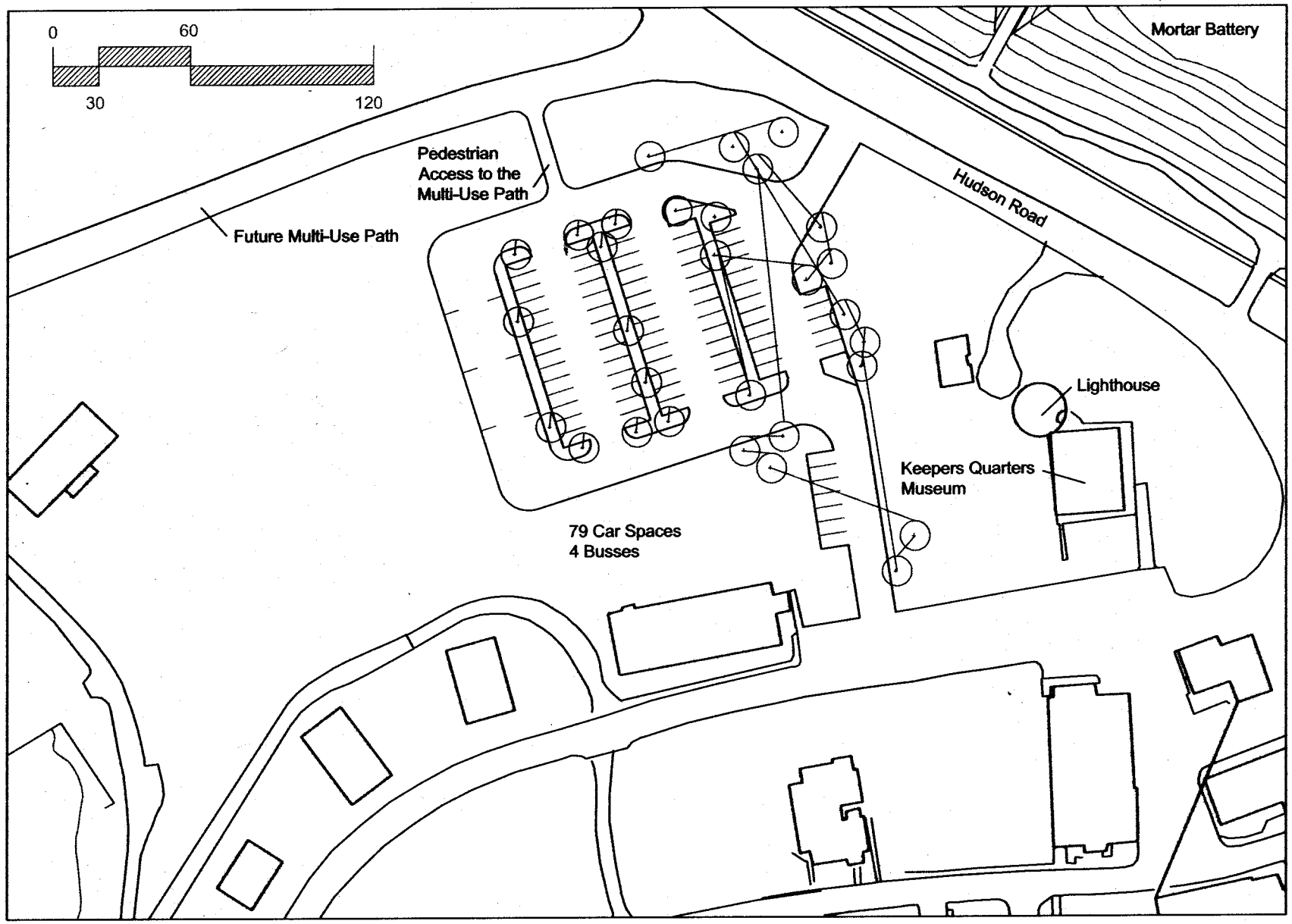
N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

New Coal Yard Lot Alternative A Preferred Alternative

Figure 3.11

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

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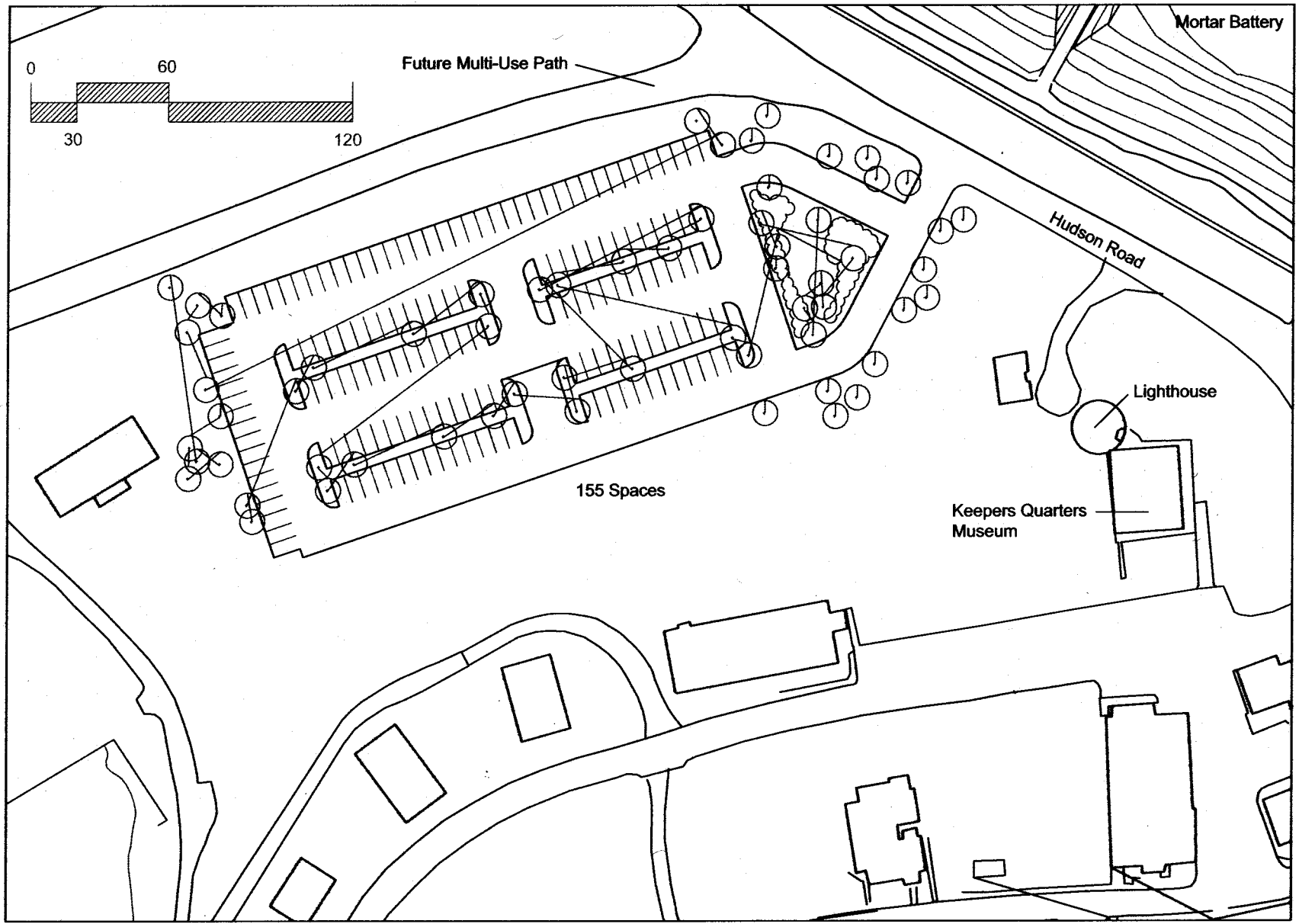
N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

New Coal Yard Lot Alternative B

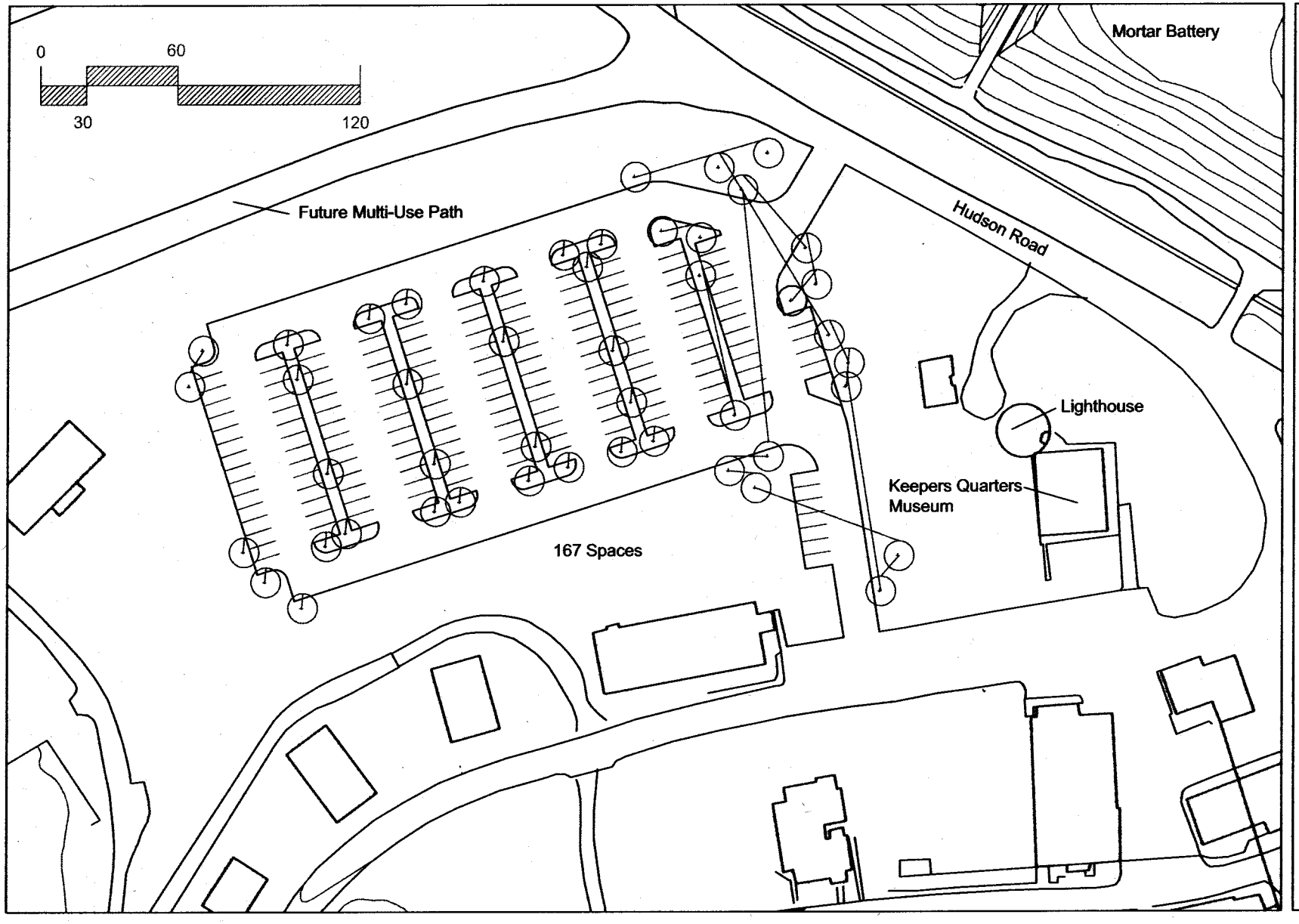
Figure 3.12

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=60'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

New Coal Yard Lot Alternative C

Figure 3.13

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

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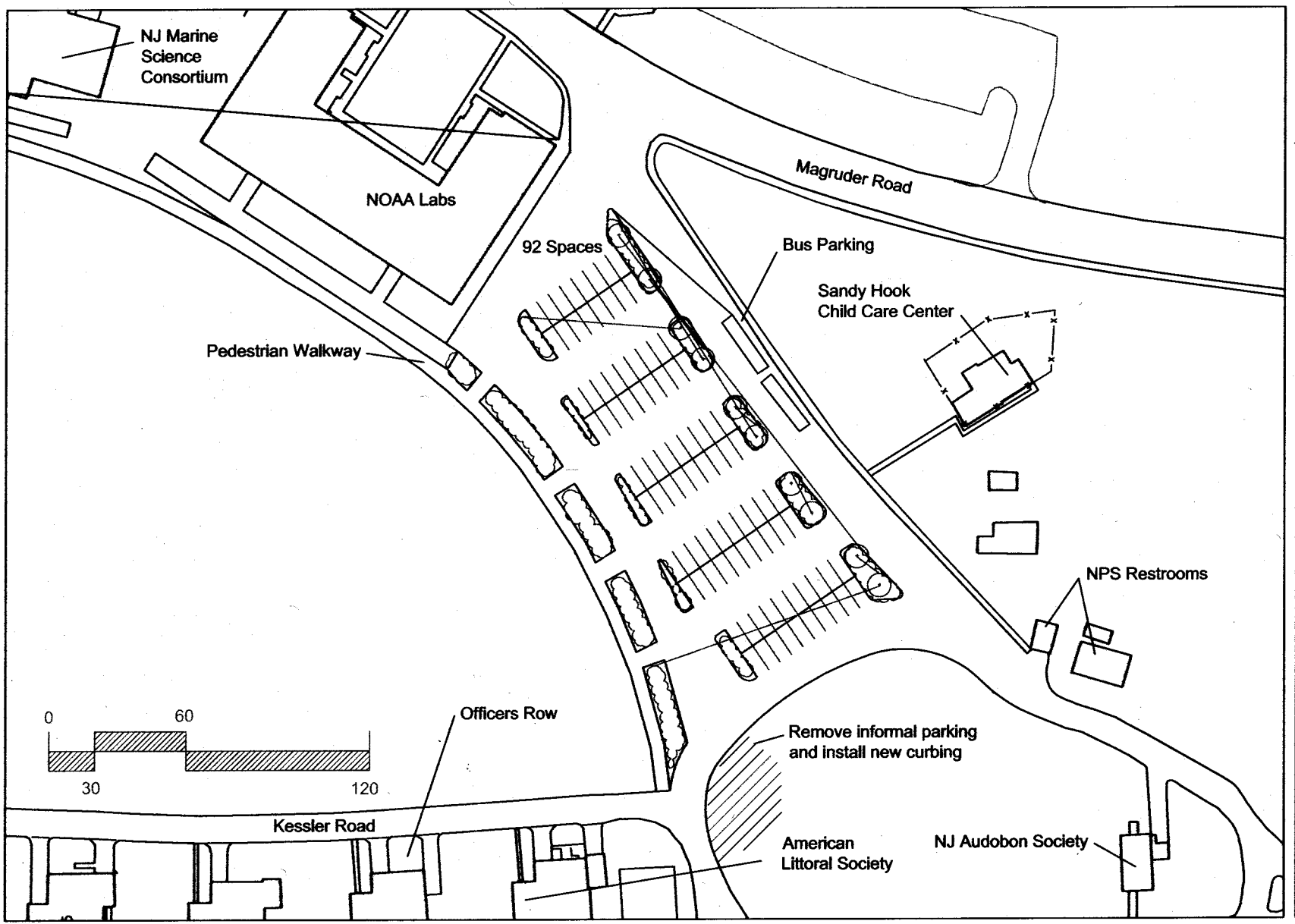
N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

Modified South Parade Lot Alternative A Preferred Alternative

Figure 3.14

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

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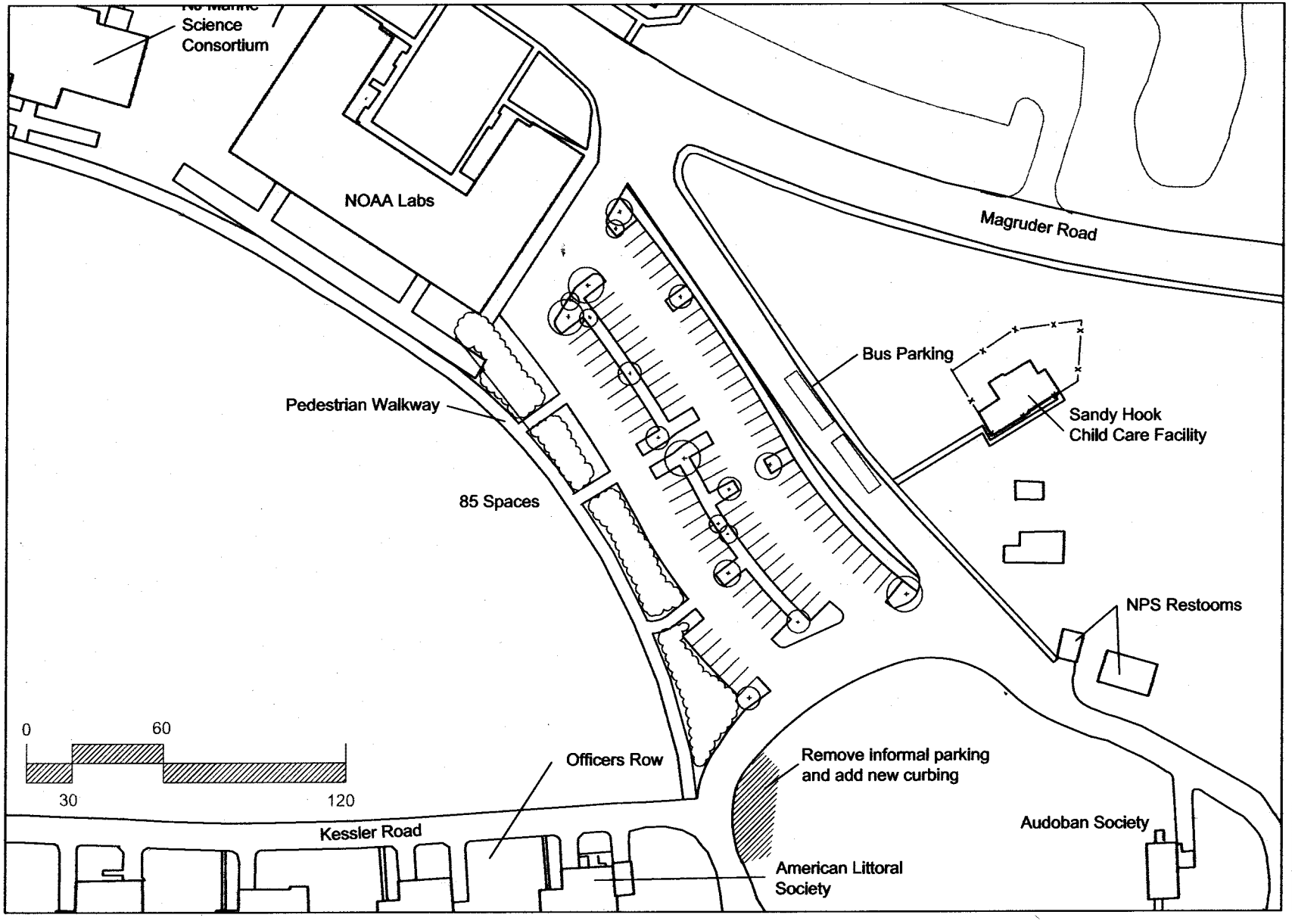


Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

South Parade Lot Alternative B

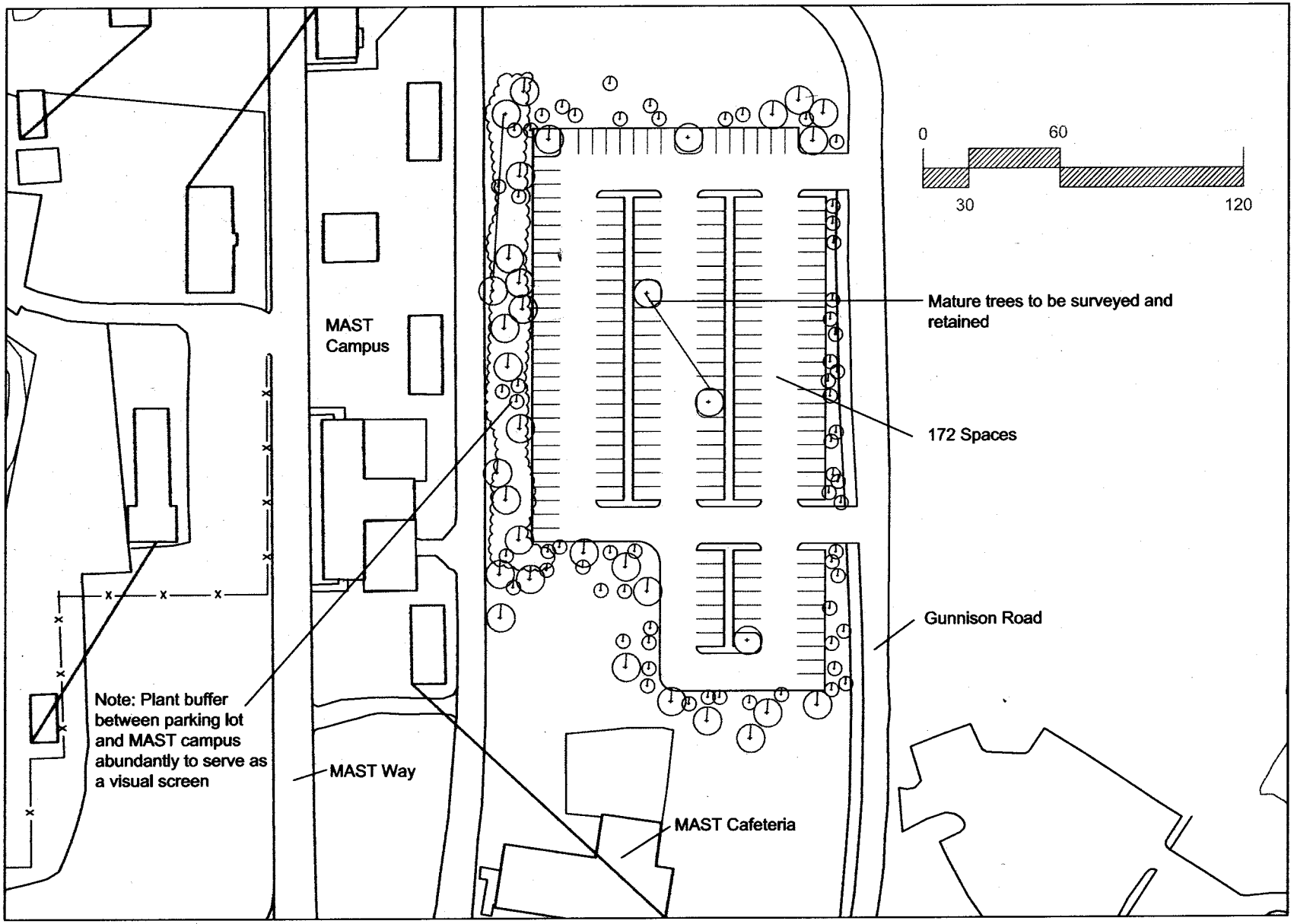
Figure 3.15

National Park Service
Olmsted Center for
Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=60'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

New Tent City Lot Alternative A Preferred Alternative

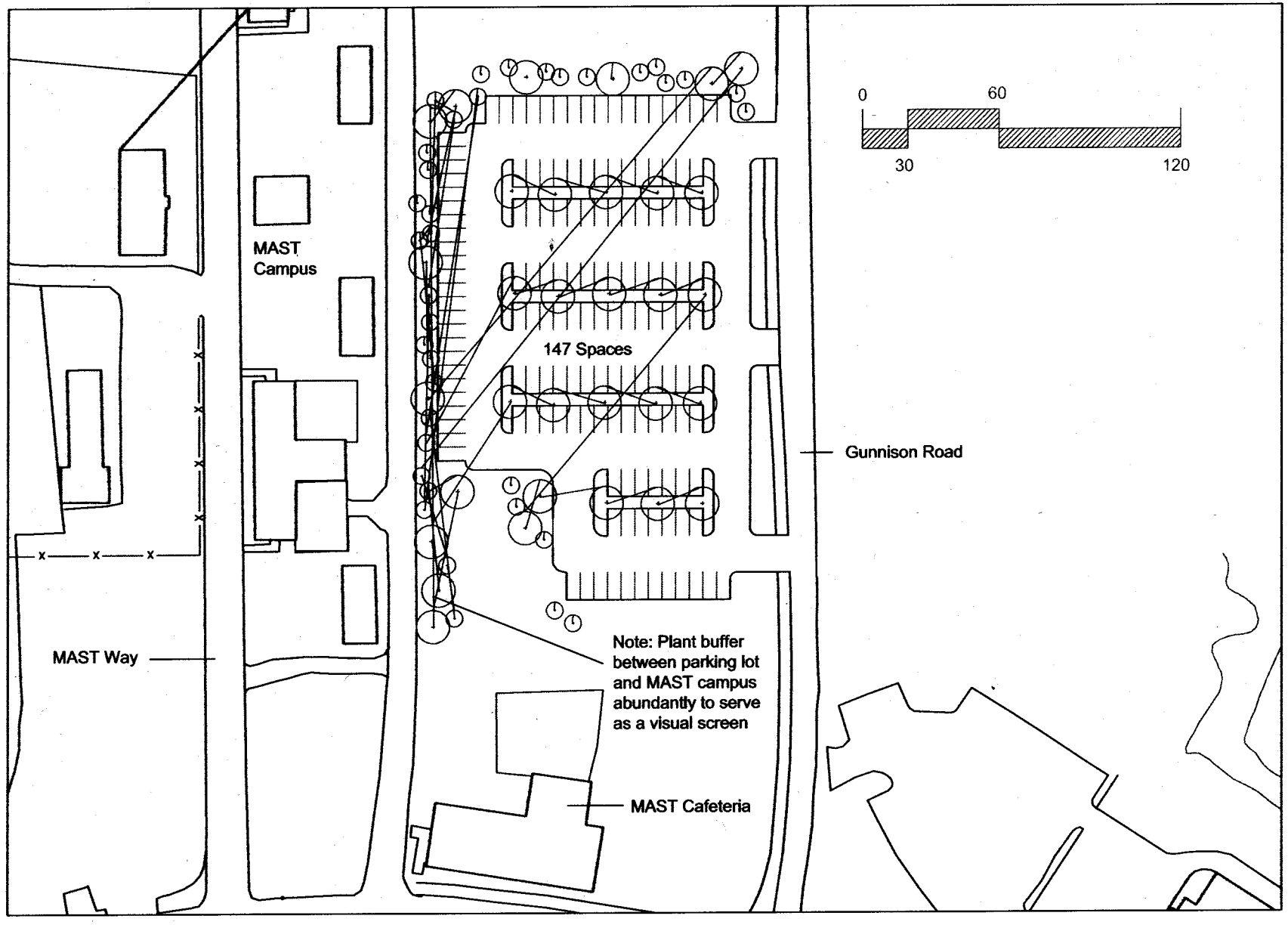
Figure 3.16

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=60'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

New Tent City Lot Alternative B

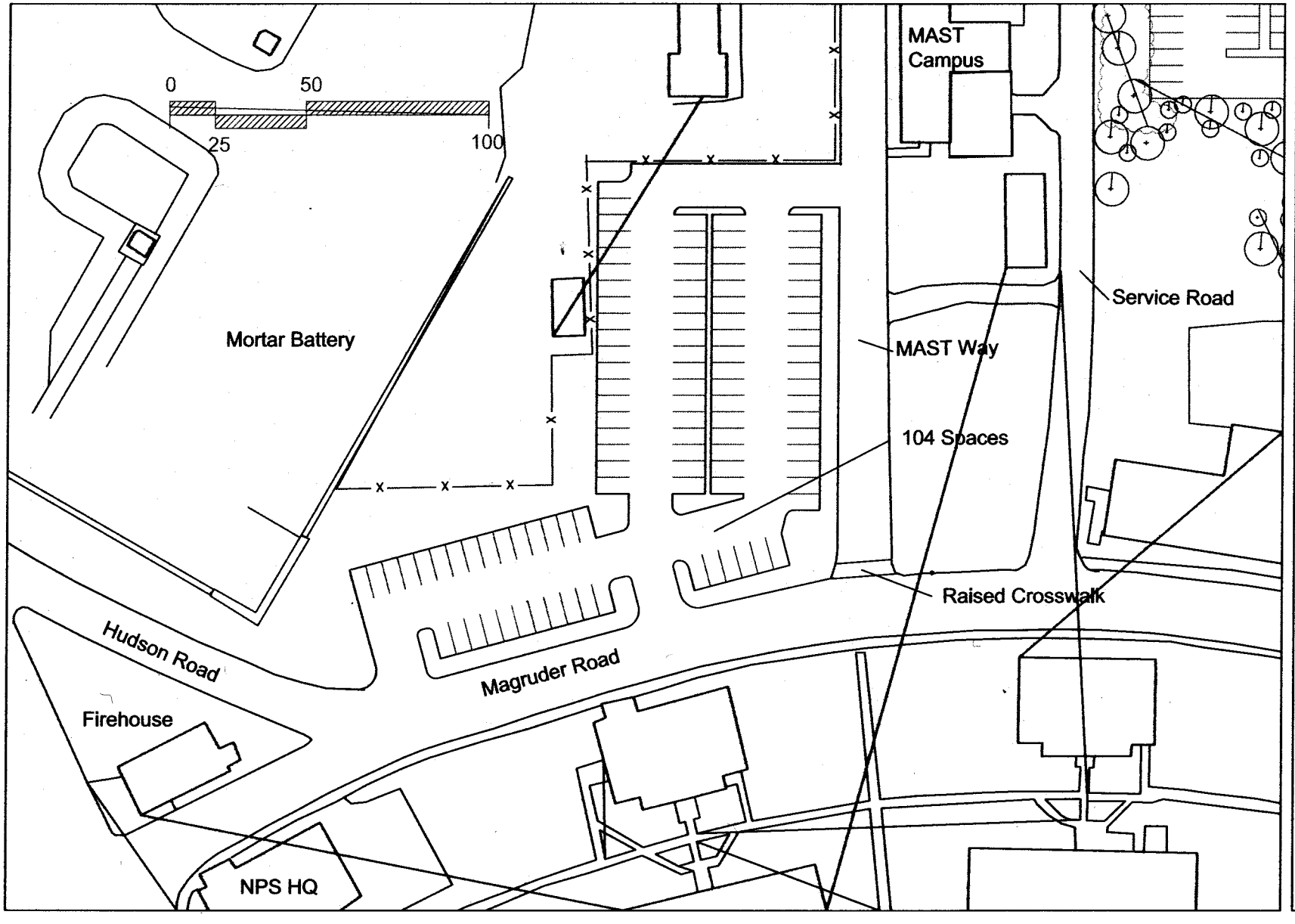
Figure 3.17

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=60'

N



Cultural Landscape Treatment Plan for Fort Hancock

Gateway National Recreation Area

Modified Fort Hancock Lot

Figure 3.18

National Park Service
Olmsted Center for Landscape Preservation
99 Warren Street
Brookline, MA 02445
617-566-1689

LEGEND

Scale: 1"=50'

N